

Salisbury – Rowan Utilities

2009 ANNUAL WASTEWATER SYSTEM REPORT

This report covers the calendar year from January 1 through December 31, 2009

On July 21, 1999, North Carolina's Governor signed into law House Bill 1160 (currently N.C. General Statute Chapter 143, Article 21, Part 1, 143-215.1C), placing reporting requirements on municipalities that operate wastewater collection and treatment systems. This legislation mandates that Salisbury – Rowan Utilities publish an annual report informing system users of specific items such as the number of system overflows, violations of permit conditions or environmental regulations, the impact of any such violations on the environment, and corrective measures taken to minimize recurrences.



This year the National Association of Clean Water Agencies recognized the Salisbury-Rowan Wastewater Treatment Plant with a Platinum Award for an outstanding compliance record. The treatment plant had no NPDES violations and was 100% compliant in 2008.

This report is available on-line at www.salisburync.gov. Any questions pertaining to this report should be directed to Environmental Services Manager, *Sonja Basinger* at 704-638-5375.

Salisbury-Rowan Utilities Treatment and Collection Staff Contacts:

Treatment Plants Manager – *Mike Frick* – 704-638-4478

Operator in Responsible Charge of Salisbury-Rowan WWTP – *Martin Trexler* – 704-638-5374

Operator in Responsible Charge of Second Creek WWTP – *Charles Wood* – 704-638-5374

Operator in Responsible Charge of Residuals Management - *Eric Helms* – 704- 638-5379

Operator in Responsible Charge of Collection System - *Randy Allman* – 704-638-5390

Salisbury-Rowan Utilities (SRU) provides wastewater treatment at the Town Creek treatment train located near Interstate 85 and the Grant Creek treatment train off of Grubb Ferry Road. Combined effluents from both trains are disinfected with ultraviolet radiation (UV) at the Salisbury-Rowan Wastewater Treatment plant (WWTP) and discharged into the Yadkin River.

SRU treats industrial, commercial and residential waste from Salisbury, Landis, China Grove, Spencer, East Spencer, Rockwell, Faith and Granite Quarry. Gravity sewer lines, force mains and lift stations collect and pump the wastewater to the treatment trains. An average of 8 million gallons per day is treated using a process called activated sludge. Trash and rags are first removed by bar screens. Heavy particles such as sand and grit settle out as the flow slows in the grit chamber. The wastewater is then pumped to aeration basins, which contain *activated sludge*. The microorganisms or “bugs” feed on the wastewater particles. The process then moves to clarifiers where the “bugs” settle out leaving clear treated wastewater or *effluent*. UV is used for disinfection at the Salisbury-Rowan WWTP.

Solids “left over” from the treatment process are separated from the treated effluent by a filter belt press. The solid material or “biosolids” that is left is applied to permitted farmland in Rowan County as a substitute for fertilizer. Only crops grown for animal feed can be raised after biosolids are applied. SRU's Land Application Program (Permit # WQ001956), Residuals Management, experienced another successful year in 2009. A combined total of 1,449.12 dry tons were land applied across 331.61 acres of farmland. Salisbury-Rowan Utilities has a total of 1,309.1 acres of land permitted.

SRU operates a North Carolina certified commercial laboratory where tests are analyzed 6 days per week. The laboratory is supervised by *Tim Brown*. He can be reached at 704-638-5376.

Salisbury-Rowan WWTP (Permit NC0023884)

The Salisbury-Rowan WWTP had no permit monitoring violations in 2009.

Salisbury-Rowan WWTP had the following overflows (bypasses) in 2009:

Date	Location	Gallons	Gallons in stream	Receiving Stream	Cause
6/5/09	Town Creek Treatment Train	51,450	51,450	Town Creek	Severe Weather Condition
11/11/09	Town Creek Treatment Train	114,200	114,200	Town Creek	Severe Weather Condition
12/25/09	Town Creek Treatment Train	169,050	169,050	Town Creek	Severe Weather Condition
	Total Gallons	334,700	334,700		

Second Creek WWTP (Permit NC0078361)

The package plant treats an average of 10,000 gallons per day in essentially the same manner as the Salisbury-Rowan WWTP but on a smaller scale. Sodium hypochlorite is used for disinfection and ascorbic acid is used for dechlorination of the effluent, which is then discharged into Second Creek. Solids are pumped and hauled to the Town Creek treatment train.

The Second Creek WWTP had the following permit monitoring violation in 2009:
December- one weekly average limit violation for BOD.

Salisbury-Rowan Utilities Collection System Sanitary Sewer Overflows (Permit WQCS00019)

Date	Location	Gallons	Gallons into stream	Receiving Stream	Cause
1/7/09	400 N. Jackson Street	100	100	UT Grant Creek	Debris
2/23/09	St. Luke's Pump Station	450	405	UT Church Creek	Equipment Failure
4/20/09	728 Maple Avenue	100	0	N/A	Roots
5/13/09	100 Blk of N. Martin Luther King Blvd	60	60	UT Town Creek	Debris
6/12/09	257 Annadale Drive	50	35	UT Grant Creek	Debris
11/11/09	400 Mahaley Avenue	3,000	3,000	UT Grant Creek	Severe Weather Condition
11/11/09	1408 East Colonial Avenue	2,000	2,000	UT Grant Creek	Severe Weather Condition
11/11/09	Southside Pump Station	38,799	38,799	UT Dutch 2 nd Crk	Severe Weather Condition
11/12/09	261 East Main Street	1,000	0	N/A	Severe Weather Condition
	Total Gallons	45,559	44,399		

All discharges of any amount that reach surface waters are reported to the Division of Water Quality at the Mooresville Regional Office.

In addition, any spills to the ground that exceed 1,000 gallons are reported. Salisbury-Rowan Environmental Services checks all receiving streams for dissolved oxygen, pH, temperature and any environmental impacts at upstream and downstream sites of each spill. If a discharge of 1,000 gallons or more reaches surface waters, a notice is placed in The Salisbury Post within 48 hours. If a discharge is more than 15,000 gallons, a notice is also placed in The Stanly News and Press to notify the affected area downstream of Salisbury.

East Spencer Collection System Sewer Overflows (Permit No. WQCS00342)

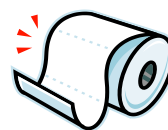
The East Spencer Collection System had no sanitary sewer overflows in 2009.

WHAT CAN YOU DO TO HELP?



1. Don't Feed "GREASY" the Grease Goblin!

- ✓ **DO** put grease in a soup can, freeze it and then throw it in the trash can!
- ✗ **DON'T** pour grease or cooking oil in the kitchen sink.
- ✓ **DO** use a paper towel to wipe out a frying pan, then put the paper towel and food scraps in the trash.
- ✗ **DON'T** use hot water to rinse grease off cooking utensils or eating utensils.



2. Never put any item in the toilet except toilet tissue!

These items and others can cause problems in the lines and treatment plants:

Paper towels, Kleenex, disposable diapers, tampon applicators, feminine hygiene pads, syringes, cotton swabs, razors, surgical gloves, anything plastic, etc.



Please report anyone dumping any type of material into manholes to Environmental Services at 704-638-5375.

It is against the law!